

## **DIRECTIONAL COUPLER FOR COMMUNICATION SYSTEM**

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### **ABSTRACT OF THE DISCLOSURE**

[046] An improved directional coupler that significantly reduces the signal degradation problems associated with distortion caused by circuit elements used to measure the transmitted power. In a selected embodiment, the directional coupler of the present invention comprises a plurality of active elements, such as capacitors, that have values selected to ensure that the distortion created by circuit elements used to measure forward transmitted power. In an embodiment of the invention, capacitors have values selected to minimize in-band distortion signals at the fundamental carrier frequency of the transmitted signal and also at the second and third harmonics of the fundamental carrier frequency.